IN THE CLAIMS:

This listing of claims will replace all prior versions, and listing of the claims in the application.

Claim 1 (currently amended) ~~Use of ERβ-selective ligands for production of medicaments~~ A method for regulating fertility with or without an additional ~~use of~~ follicular sex ~~steroids~~ steroid comprising administering a therapeutically effective amount of a ERβ-selective ligand to a patient in need thereof.

Claim 2 (currently amended) ~~Use of ERb-selective agonists~~ The method according to claim 1, wherein a therapeutically effective amount of a ERβ-selective agonist is administered for the treatment of female infertility.

Claim 3 (currently amended) The method ~~Use~~ according to claim 2 ~~to support IVF (in vitro fertilization)~~ in connection with ~~in vivo treatment~~ in vitro fertilization.

Claim 4 (currently amended) ~~Use~~ The method according to claim 2, ~~for treatment of females which are suffering from~~ wherein said female infertility is ovarian infertility ~~(PCO syndrome)~~.

Claim 5 (currently amended) ~~Use for treatment of~~ A method for treating ovarian failure associated with aging comprising administering a therapeutically effective amount of a ERβ-selective ligand to a patient in need thereof.

Claim 6 (currently amended) ~~Use of ERβ-selective antagonists~~ The method according to claim 1, wherein a therapeutically effective amount of a ERβ-selective antagonist is administered for ovarian contraception.

Claim 7 (currently amended) ~~Use~~ The method according to claim 6, ~~for inhibiting~~ wherein said method inhibits folliculogenesis.

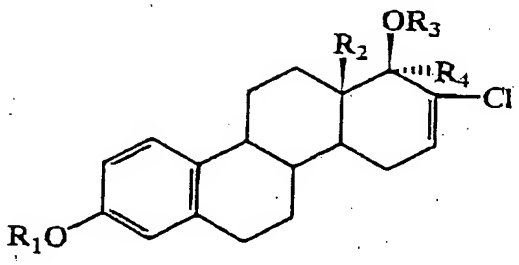
Claim 8 (currently amended) ~~Use~~ The method according to claim 6, ~~for inhibiting~~ wherein said method inhibits ovulation.

Claim 9 (currently amended) ~~Use~~ The method according to claim 6, ~~for inhibiting~~ wherein said method inhibits preimplantational development of ovulated oocytes.

Claim 10 (currently amended) ~~Use of ERβ-selective ligands according to claim 1 for production of medicaments~~ A method for regulating fertility without additional use of a follicular sex ~~steroids~~ steroid comprising administering a pharmaceutical composition comprising a ERβ-selective ligand according to claim 1.

Claim 11 (currently amended) ~~Use of ERβ-selective ligands according to claim 10 for production of medicaments for regulating fertility without additional use of a~~ The method according to claim 10, wherein said sex steroid is progestin.

Claim 12 (currently amended) A 17-Chloro-D ~~homosteroids~~ homosteroid of ~~general~~ formula I



(I)

in which

R_1 ~~means~~ is a hydrogen atom or a C_{1-6} alkanoyl radical or a benzoyl radical,

R_2 ~~means~~ is a C_{1-8} alkyl group,

R_3 ~~means~~ is a hydrogen atom, a C_{1-6} alkyl radical, a C_{1-6} alkanoyl radical or a benzoylyl radical, and

R4 ~~means~~ is a hydrogen atom, a C_{1-6} alkyl radical, a C_nF_{2n+1} group, in which n=1, 2 or 3, or a $C{\equiv}CR_5$ group, in which R_5 is a hydrogen atom, a C_{1-6} alkyl radical or an unsubstituted or substituted phenyl radical.

Claim 13 (presently amended) A compound ~~Compounds~~ of ~~general~~ formula I according to claim 12 ~~namely~~ selected from:

in which

R_1 means a hydrogen atom or a C_{1-6} alkanoyl radical or benzoyl radical,

R_2 means a C_{1-6} alkyl group,

R_3 means a hydrogen atom, a C_{1-6} alkyl radical, C_{1-6} alkanoyl radical or benzoylyl radical, and

R_4 means a hydrogen atom, a C_{1-6} alkyl radical, a C_nF_{2n+1} group, in which n = 1, 2 or 3, or a $C{\equiv}CR_5$ group, in which R_5 is a hydrogen atom, a C_{1-6} alkyl radical or an unsubstituted or substituted phenyl radical.

14 13. Compounds of general formula I according to claim 12, namely

17-Chloro-17aα-ethinyl-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-propinyl-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-13β-ethyl-17aα-methyl-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3,17aβ-diol

17aβ-acetoxy-17-chloro-17aα-methyl-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3-ol

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17-chloro-17aα-(trifluoromethyl)-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-(pentafluoroethyl)-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-methyl-17aβ-(methoxy)-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3-ol

17-chloro-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-(trifluoromethyl)-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-(pentafluoroethyl)-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-methyl-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-ethyl-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-ethinyl-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-propinyl-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-(trifluoromethyl)-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol-diacetate

17aβ-acetoxy-17-chloro-17aα-(trifluoromethyl)-17a-homoestra-1,3,5(10),16-tetraene-3-ol

17-chloro-17aβ-methoxy-17aα-(trifluoromethyl)-17a-homoestra-1,3,5(10),16-tetraene-3-ol

17-chloro-(17aα)-21-(4'-methylsulfonylphenyl)-17a,18a-dihomogona-1,3,5(10),16-tetraen-20-yne-3,17aβ-diol

17-chloro-(17aα)-21-(phenyl)-13β-methyl-17a-homogona-1,3,5(10),16-tetraen-20-yne-3,17aβ-diol

17-chloro-(17aα)-21-(4'-cyanophenyl)-13β-methyl-17a-homogona-1,3,5(10),16-tetraen-20-yne-3,17aβ-diol

17-chloro-(17aα)-21-(4'-acetylaminophenyl)-13β-methyl-17a-homogona-1,3,5(10),16-tetraen-20-yne-3,17aβ-diol

17-chloro-(17aα)-21-(4'-hydroxyphenyl)-13β-methyl-17a-homogona-1,3,5(10),16-tetraen-20-yne-3,17aβ-diol.

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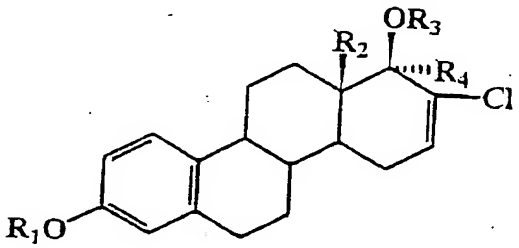
Claim 14 (currently amended) ~~Process~~ A process for the production of a 17-chloro-D-~~homosteroids~~ homosteroid of the ~~general~~ formula I according to claim 12,



(I)

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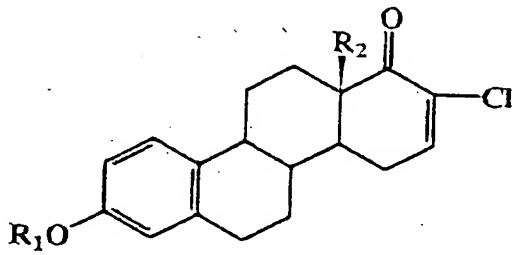
comprising converting ~~characterized in that~~ a 17-chloro-1,3,5(10),16-tetraene-17-one of ~~general~~ formula II



(II)

in which

R_1 ~~means~~ is a hydrogen atom, a C_{1-5} alkyl radical, a C_{1-6} alkanoyl radical or a benzoyl radical,

R_2 ~~means~~ is C_{1-6} alkyl group,

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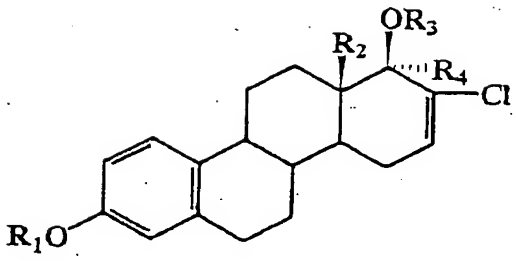
with a magnesium-organic reagent of general formula BrMg alkyl, BrMg alkenyl or BrMg alkinyl or with acetylene or an alkyl- or aryl-substituted acetylene in the presence of a base ~~bases such as tert-BuOk,~~ or with a lithium-organic compound ~~such as LiC_2F_5,~~ or with a silicon-organic compound ~~such as trifluoromethyl trimethylsilane~~ into a 17aα-substituted compound of

~~general~~ formula III,



(III)

in which

R_1 is a hydrogen atom, a C_{1-6} alkyl radical, a C_{1-6} alkanoyl radical or a benzoyl radical,

R_2 is a C_{1-6} alkyl group,

R_3 is a hydrogen atom, a metal atom or a silyl group, and

R_4 is a hydrogen atom, a C_{1-6} alkyl group, a C_nF_{2n+1} group, in which n=1, 2 or 3, or a $C{\equiv}CR_5$ group, in which R_5 is a hydrogen atom, a C_{1-6} alkyl radical or an unsubstituted or substituted phenyl radical,

whereby in the case of R_5 = hydrogen, the free 17aα-ethinyl compound of general formula III is further modified by a SONAGASHIRA reaction to form compounds with $R_5 = C_6H_4R_6$, in which R_6 stands for a free or substituted hydroxyl group, amino group, thiol group, sulfamate group, sulfonyl group or a C_{1-6} alkyl group or a C_{6-12} aryl group.

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Claim ~~15~~. (currently amended) ~~Process~~ The process according to claim 14, wherein said compound ~~compounds~~ of formula III in which R_1 is a C_{1-6} alkyl radical, ~~are~~ is converted by ether cleavage into ~~the~~ a free hydroxyl group.

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Claim ~~16~~. (currently amended) ~~Process~~ The process according to claim 14, wherein said compound ~~compounds~~ of formula II, in which R_1 is an acyl radical, ~~are~~ is converted by ether cleavage into ~~the~~ a free hydroxyl groups.

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Claim 17. (currently amended) ~~Process~~ The process according to claim 14, wherein said compound ~~compounds~~ of formula II in which R_3 is a hydrogen atom, ~~are~~ is converted into ethers or esters.

Claim 18. (currently amended) A method for ~~Use of the compounds of general formula I according to claim 12 for the production of pharmaceutical agents for~~ contraception in women comprising administering a therapeutically effective amount of a compound of formula I according to claim 12.

Claim 19. (currently amended) A method for ~~Use of the compounds of general formula I according to claim 12 for the production of pharmaceutical agents for~~ contraception in men comprising administering a therapeutically effective amount of a compound of formula I according to claim 12.

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Claim 20. (currently amended) ~~Use of the compounds of general formula I according to claim 12 for the production of pharmaceutical agents~~ A method for treating benign or malignant proliferative diseases of the ovary comprising administering a therapeutically effective amount of a compound of formula I according to claim 12 .

Claim 21. (currently amended) ~~Use according to claim 19 for treating~~ The method of claim 20, wherein said malignant proliferative disease is ovarian cancer.

Claim 22. (currently amended) ~~Use according to claim19 for treating~~ The method of claim 20, wherein said malignant proliferative disease is a granulosa cell ~~tumors~~ tumor.

Claim 23. (previously amended) A pharmaceutical composition ~~Pharmaceutical compositions that contain~~ comprising at least one compound according to claim 12, as well as a pharmaceutically compatible vehicle.

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Claim ~~24~~.(previously amended) A pharmaceutical composition ~~Pharmaceutical compositions~~ according to claim 12, ~~which in addition to at least one compound of general formula I containing at~~ further comprising ~~least one compound that is selected from the group of~~ a GnRH antagonists, a progesterone receptor antagonists, a mesoprogestins, a gestagens or a tissue-selective gestagens.

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Claim ~~25~~ (new) The method according to claim 2, in connection with an in vivo treatment.

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Claim ~~26~~ (new) The method according to claim 14, wherein said base is tert-BuOK.

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Claim ~~27~~ (new) The method according to claim 14, wherein said lithium organic compound is LiC_2F_5.

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Claim ~~28~~ (new) The method according to claim 14, wherein said silicon-organic compound is trifluoromethyl trimethylsilane.